performance

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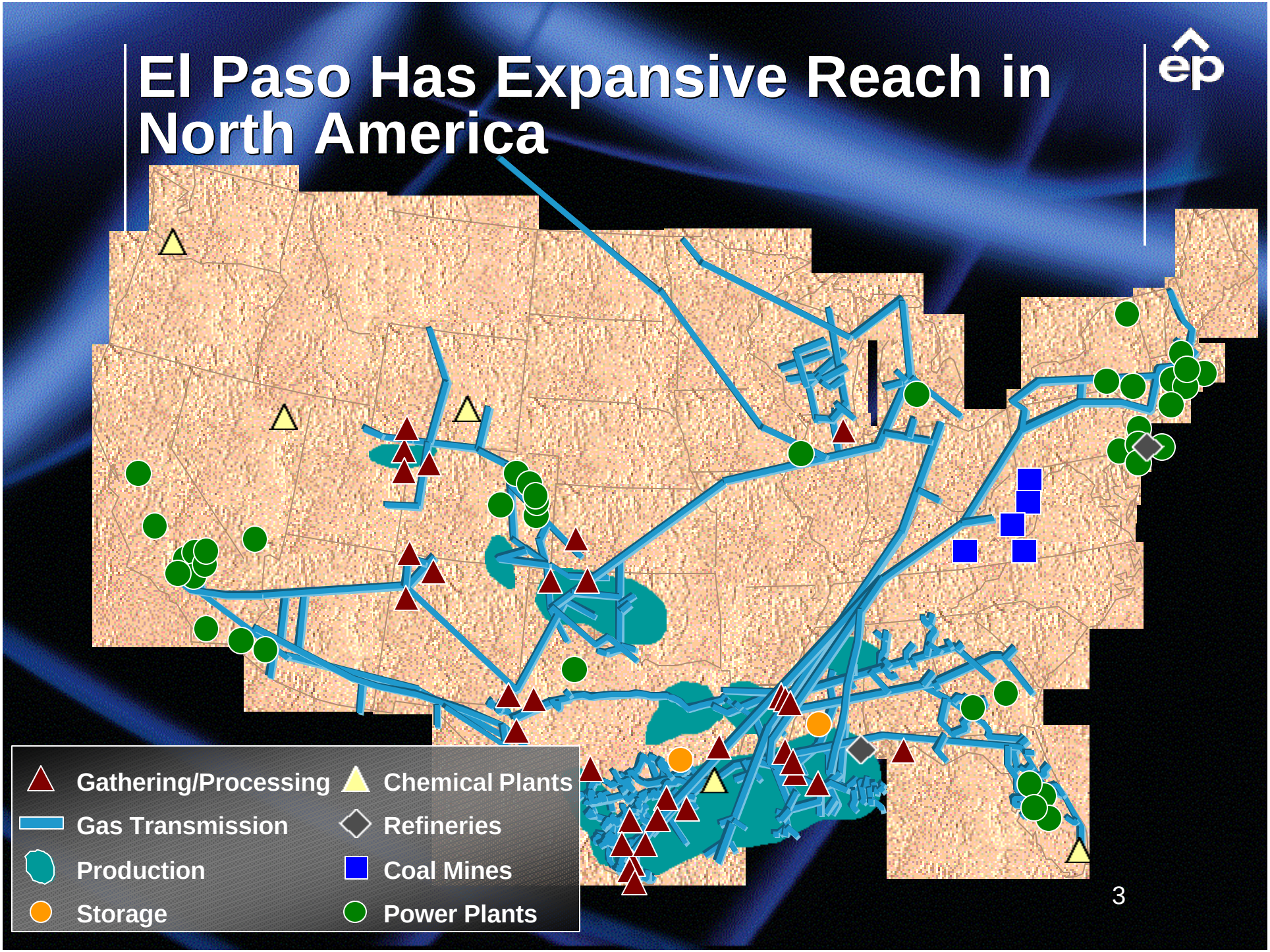
Financing, Management and Pricing of the Cross-border Gas Pipeline Projects in North America

El Paso Corporation

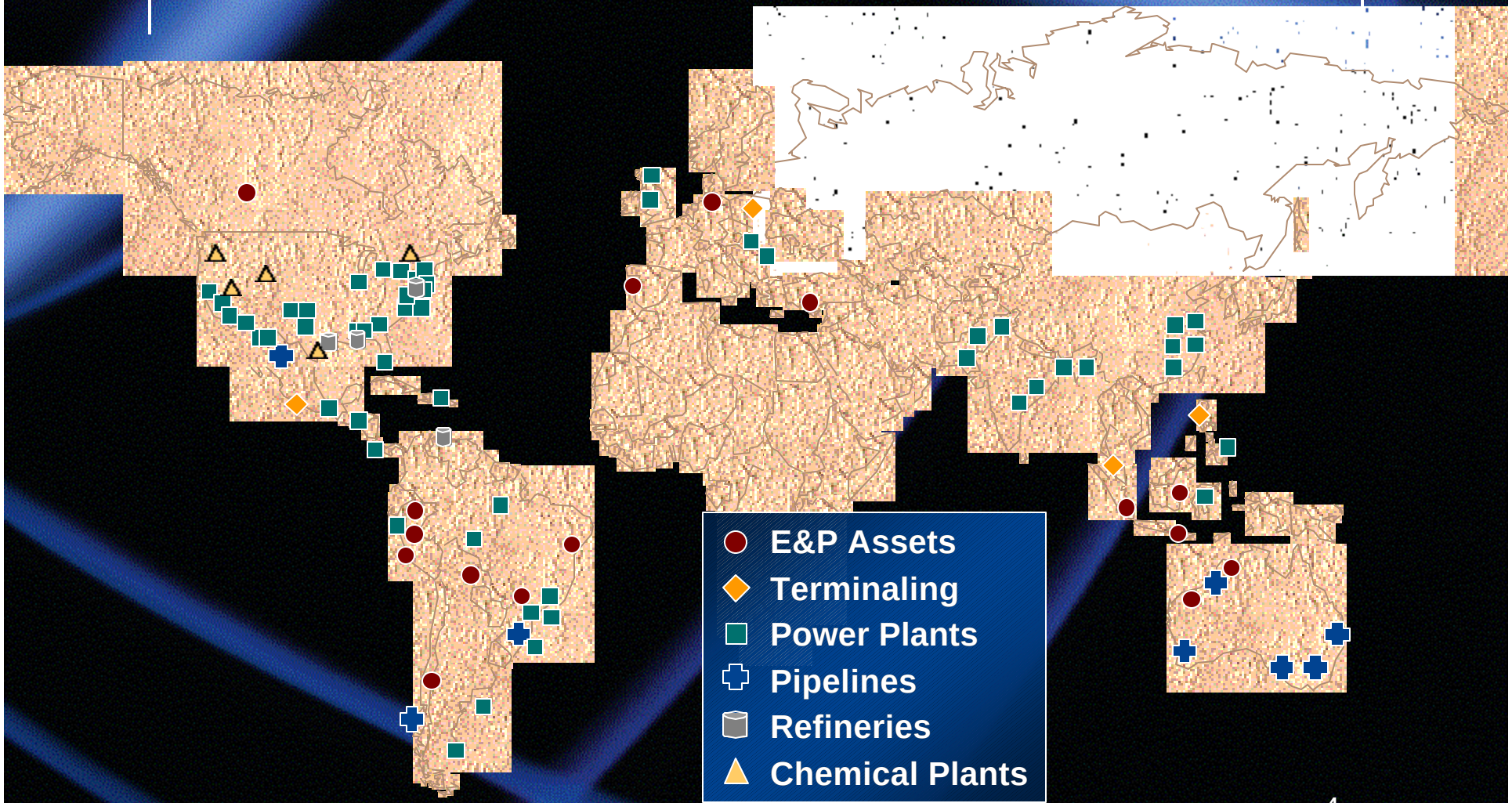
El Paso Corporation is a major international energy infrastructure company with $46 billion of assets in 26 countries

- Gas transmission
- Power generation
- Gas gathering and processing
- Gas and electricity trading
- LNG
- Petrochemical refining
- Gas and oil production

El Paso Has Expansive Reach in North America



El Paso: Global Presence



Outline

- Recent and Proposed Cross-border Gas Pipeline Projects
- Financing of Cross-border Projects
- Management of Cross-border Projects
- Pricing of Cross-border Projects
- Conclusions

Recent and Proposed Cross-border Gas Pipeline Projects

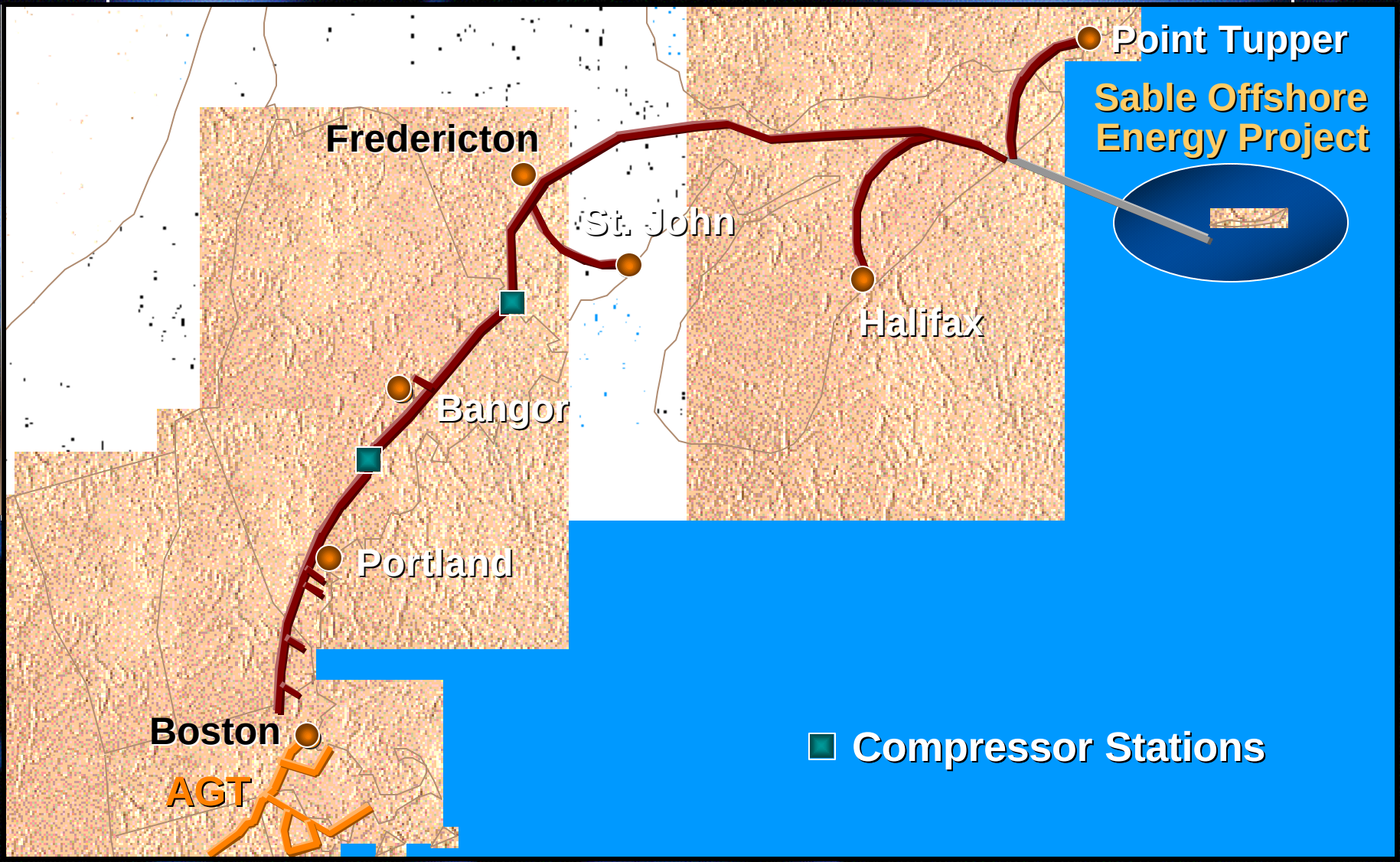
- Maritimes & Northeast Pipeline
  - Offshore Nova Scotia, Canada to northeastern United States
  - Completed December 1999
- Alliance Pipeline
  - British Columbia, Canada to Chicago, United States
  - Completed December 2000
- Vector Pipeline
  - Chicago, United States to Dawn, Ontario
  - Completed December 2000
- North Baja Pipeline
  - Arizona, United States to Rosarito, Mexico
  - Scheduled to be completed January 2004

Financing of Cross-border Gas Pipelines in North America

Regulatory Bodies Governing North American Pipelines

- United States
  - Federal Energy Regulatory Commission (FERC)
- Canada
  - National Energy Board (NEB)
- Mexico
  - Commission to Regulate Energy (CRE)

Maritimes & Northeast Pipeline



Maritimes & Northeast Pipeline

- Cost of $1.2 billion
- Pipeline length of 1,086 km (663 miles)
- Capacity of 530,000 MMBtu/d
- Placed into service December 1, 1999
- Rate (toll) of $1.20 per MMBtu
- Owners
  - Duke Energy: 37.5%
  - Westcoast Energy: 37.5%
  - ExxonMobil: 12.5%
  - Nova Scotia Power: 12.5%

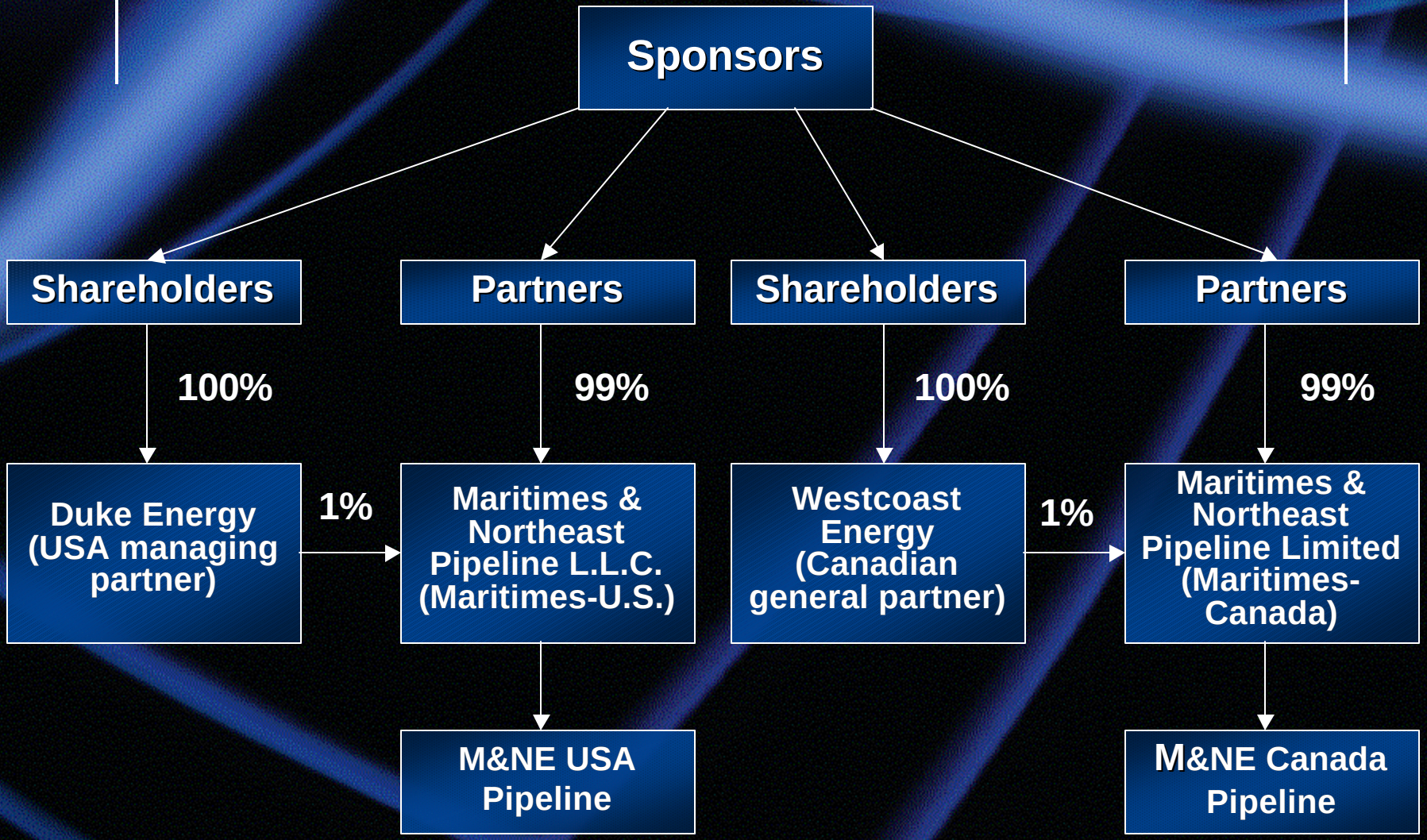
Maritimes & Northeast Pipeline

- Debt/equity structure of 75%/25%
- Debt
  - US$521.4 million fully amortizing
  - Canadian $712.3 million with 36% balloon payment
  - All debt maturing on November 30, 2009
- Lead banks are
  - Bank of America
  - The Canadian Imperial Bank of Commerce

Maritimes & Northeast Pipeline

- M&NE was the only natural gas pipeline linking the Sable fields to natural gas markets
  - Because of its importance, Mobil agreed to capacity Backstop Agreements
- Backstop Agreements by Mobil
  - Mobil agreed to purchase approximately 175 MMBtu/d of unsubscribed firm capacity in both Canada and U.S. for 20 years
- Due to the Backstop Agreements, there was no cross default between the physical assets or partnership interests in the U.S. and Canada

Maritimes & Northeast Pipelines (M&NE) Ownership Structure



Alliance Pipeline System

Alliance Pipeline

- Cost of $3.1 billion
- Largest project financed in North America
- Pipeline length of 1,860 miles
- Capacity of 1,600,000 MMBtu/d
- Placed into service December 1, 2000
- Rates (tolls)
  - $0.82 per MMBtu for rich gas
  - $0.73 per MMBtu for lean gas

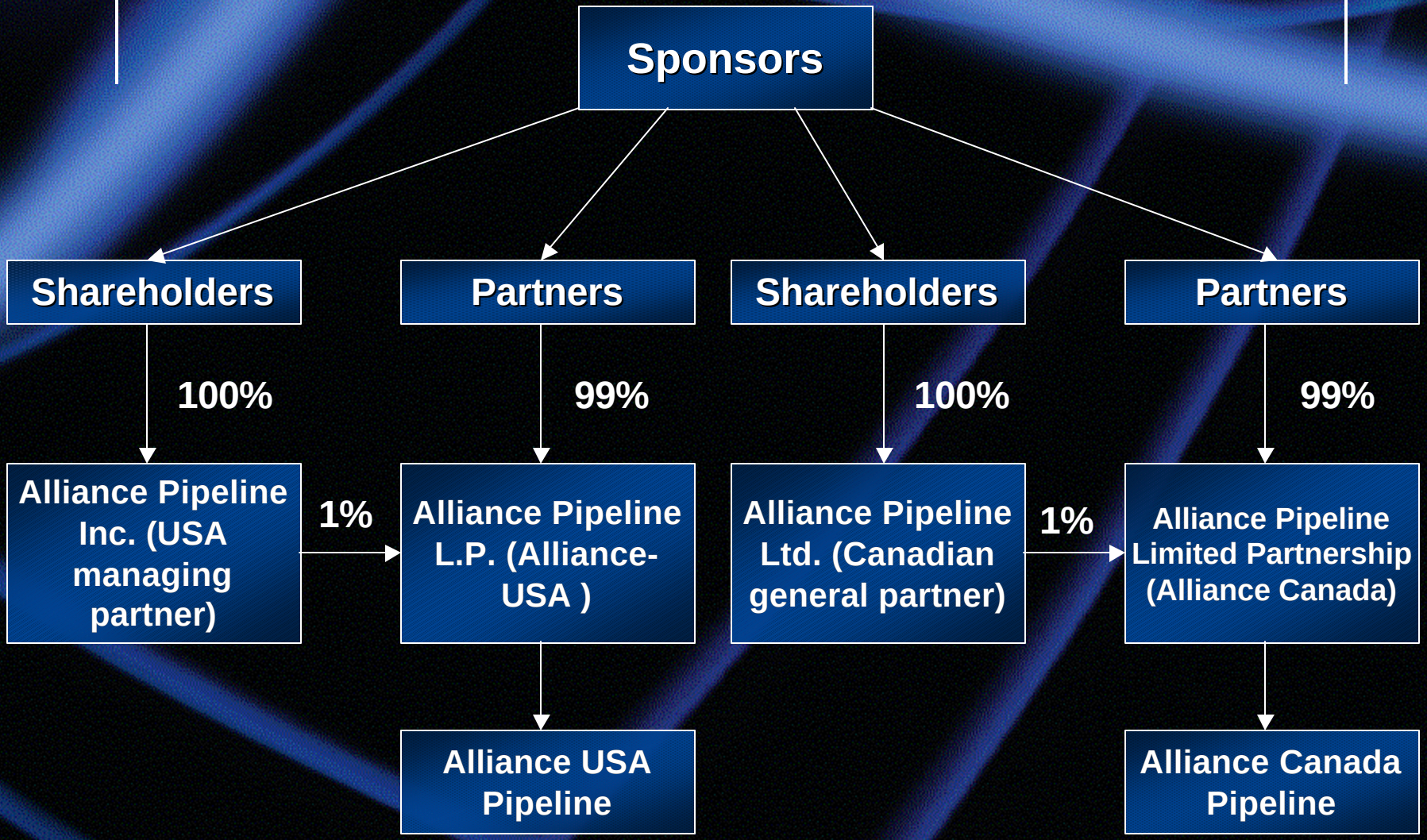
Alliance Pipeline

- Owners
  - Fort Chicago Energy Partners: 26%
  - Westcoast Energy: 23.6%
  - Enbridge Inc.: 21.4%
  - The Williams Companies, Inc.: 14.6%
  - El Paso Corporation (The Coastal Corporation): 14.4%

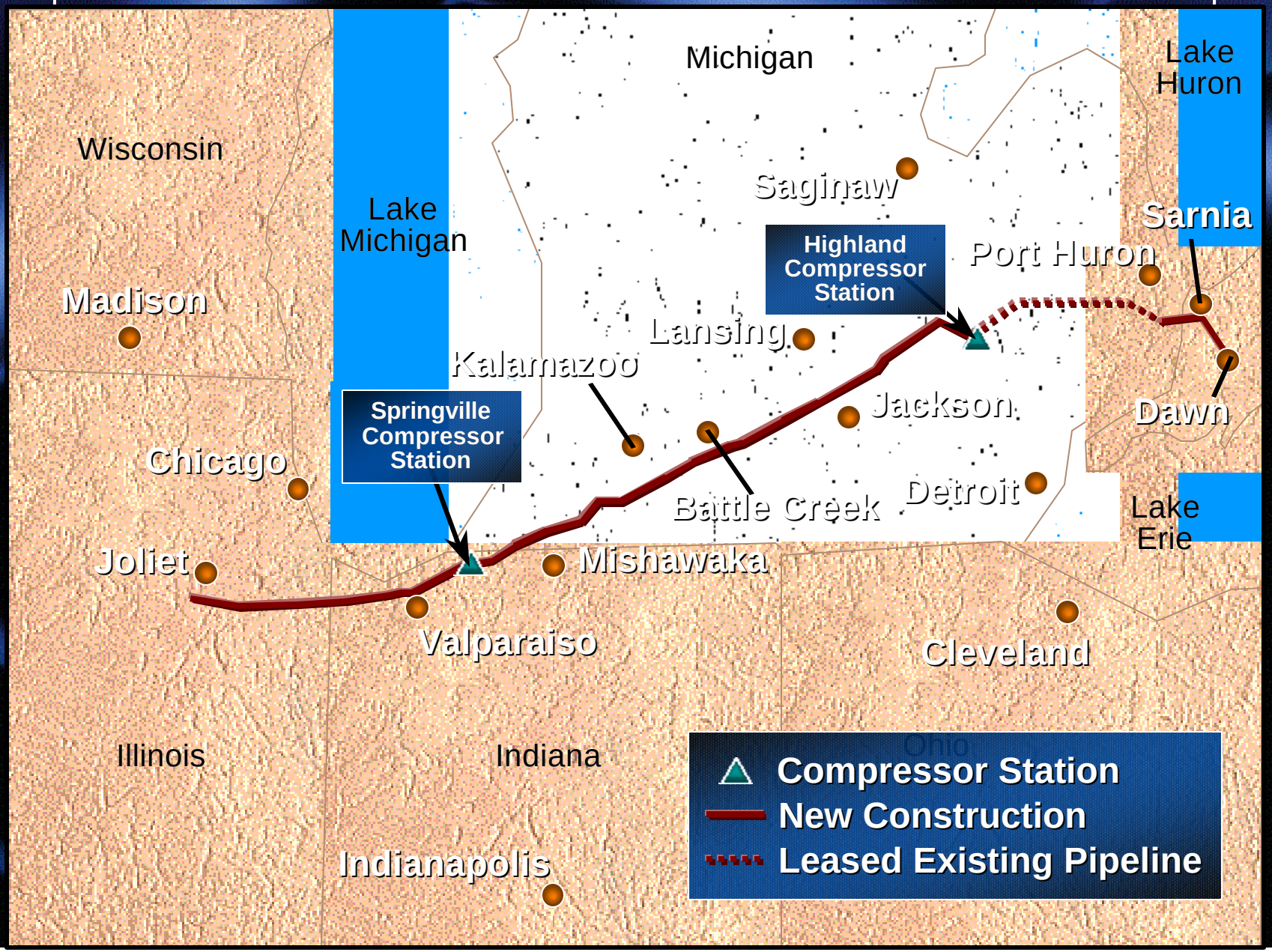
Alliance Pipeline

- Debt/equity structure of 70%/30%
- Debt
  - US$961.5 million with balloon payment
  - Canadian $1.6 billion with balloon payment
  - All debt maturing on December 21, 2008
- Lead banks were
  - Bank of Montreal
  - The Bank of Nova Scotia
  - The Chase Manhattan Bank
  - Royal Bank of Scotland

Alliance Pipeline Ownership Structure



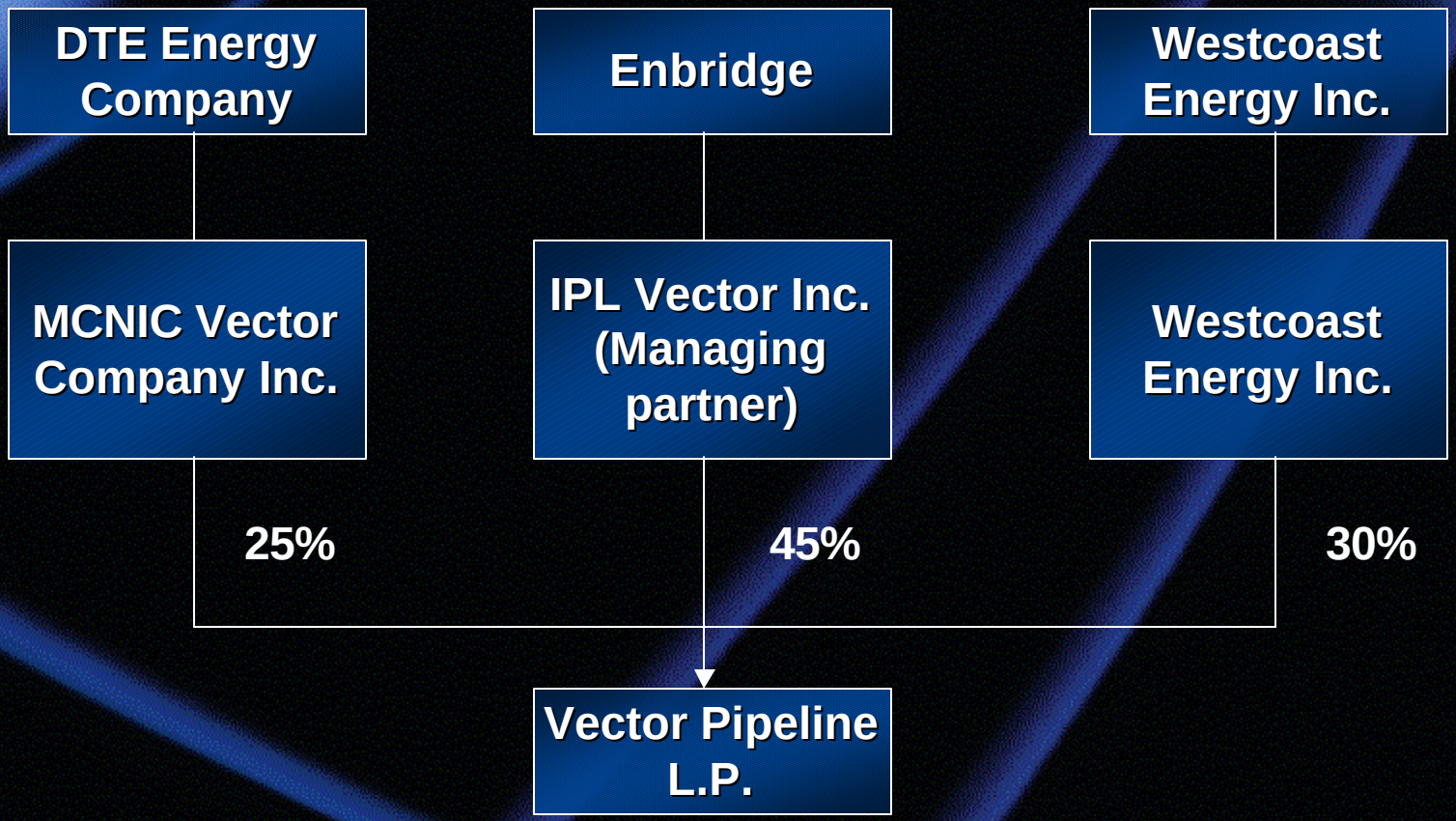
Vector Pipeline



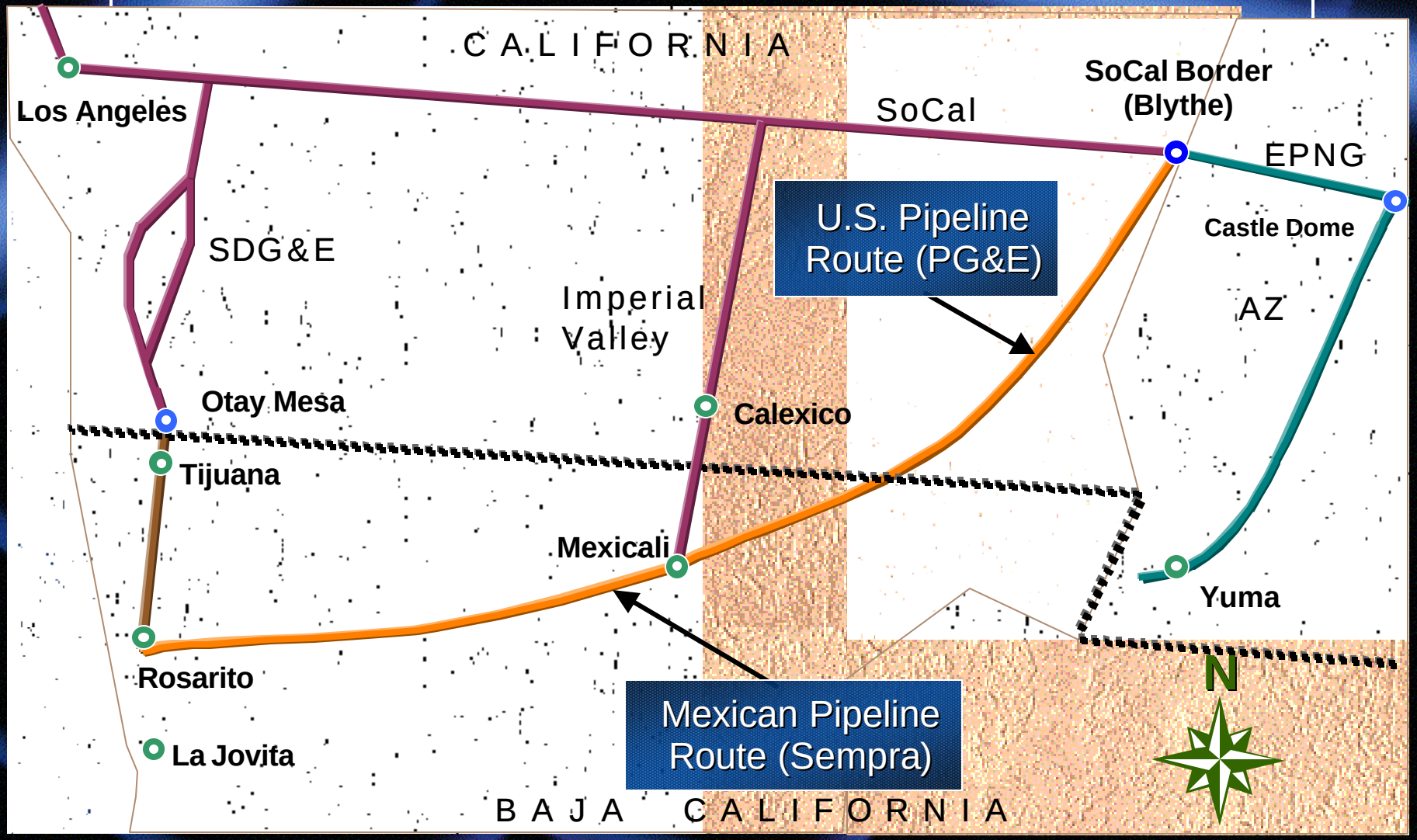
Vector Pipeline

- Cost of $504 million
- Pipeline length of 348 miles
- Capacity of 1,000,000 MMBtu/d
- Placed into service December 1, 2000
- Rate (toll) of $0.25 per MMBtu
- Owners
  - Enbridge Inc.: 45%
  - Westcoast Energy: 30%
  - MCN Energy Group: 25%

Vector Pipeline Ownership Structure



Proposed North Baja Pipeline



North Baja Pipeline

- Estimated cost of $146 million
- Pipeline length of 212 miles
- Capacity of 500,000 MMBtu/d
- Projected rate (toll) of $0.14 per MMBtu
- Owners
  - Pacific Gas & Electric (PG&E): 50%
  - Sempra Energy International: 50%
- PG&E is leading U.S. portion while Sempra is leading Mexican portion

Characteristics of Cross-border Gas Pipeline Projects in North America

- Same owners
- Some shippers, perhaps all, in common
- Different regulatory environments
- Different rates (tolls) and tariff for pipeline portion in each country
  - 1 total rate (toll) may be expressed
- Different financings, under similar terms
- Separate operating companies in each country
- 1 major difference is that the financing for a cross-border gas pipeline will usually employ cross-defaults between the assets in both countries

Typical Conditions Precedent for Initial Funding of Pipeline Projects in North America

- Shipping contracts executed and in full force and effect covering 90% or more of design capacity
- Reports from Independent Engineer, Insurance Advisor, Gas Market Advisor, and Supply Advisor
- All regulatory permits in full force and effect and not subject to rehearing
- Substantially all of the necessary real estate rights required for construction obtained with a detailed plan for acquiring remaining rights

Typical Conditions Precedent for Initial Funding of Pipeline Projects in North America

- Construction and material contracts covering 80% of estimated construction costs have been signed on a fixed-price basis
- Equity commitment sufficient to fund a 20% capital budget overrun

Management of Cross-border Gas Pipelines in North America

Management of Cross-border Gas Pipeline Projects in North America

- Limited Partnership is usual structure
  - 1 is formed in each country
    - Not engaged in a partnership or joint venture with each other
  - Equity owners have voting rights to their investment
  - Partnerships jointly enter into a Pipeline Interconnection and Joint Operation Agreement which govern the operation of the entire Pipeline

Management of Cross-border Gas Pipeline Projects in North America

- 2 methods have been used for day-to-day management and operations
  - New operating companies formed
    - 1 for each country
  - Outsourced to subsidiary of existing owner company
    - 1 for each country
    - Usually would be pipeline company

Pricing (Rates or Tolls) of Cross-border Gas Pipelines in North America

Pricing of Pipeline Projects in North America

- Natural gas pipeline rates (tolls) in North America are regulated, with few exceptions
- The rates (tolls) charged are a function of the required revenues for a pipeline project

Definition of Cost of Service by FERC

Required Revenues = Cost of Service

Amount of revenue a company must collect from rates charged customers to provide for payment of its operating and maintenance expenses, taxes, depreciation and a fair return on its rate base

Although FERC allows full recovery of a pipeline's cost of service, including a return on its investment, it is not a guaranteed recovery. Factors, such as the pipeline's ability to design competitive rates, may affect the amount of return a pipeline earns on its investment

Cost of Service Components

Per Accounting Records

Operation and maintenance expense
Administrative and general expense
Depreciation, depletion, and amortization
Other revenues (credited)
Taxes other than income taxes

Calculated Subject to FERC Orders

Return (interest and equity)
Income taxes

Cost of service = Revenue requirement

Rate Base Components

Rate Base = Gross plant investment

- Accumulated DD&A
- Accumulated deferred taxes
+ Working capital

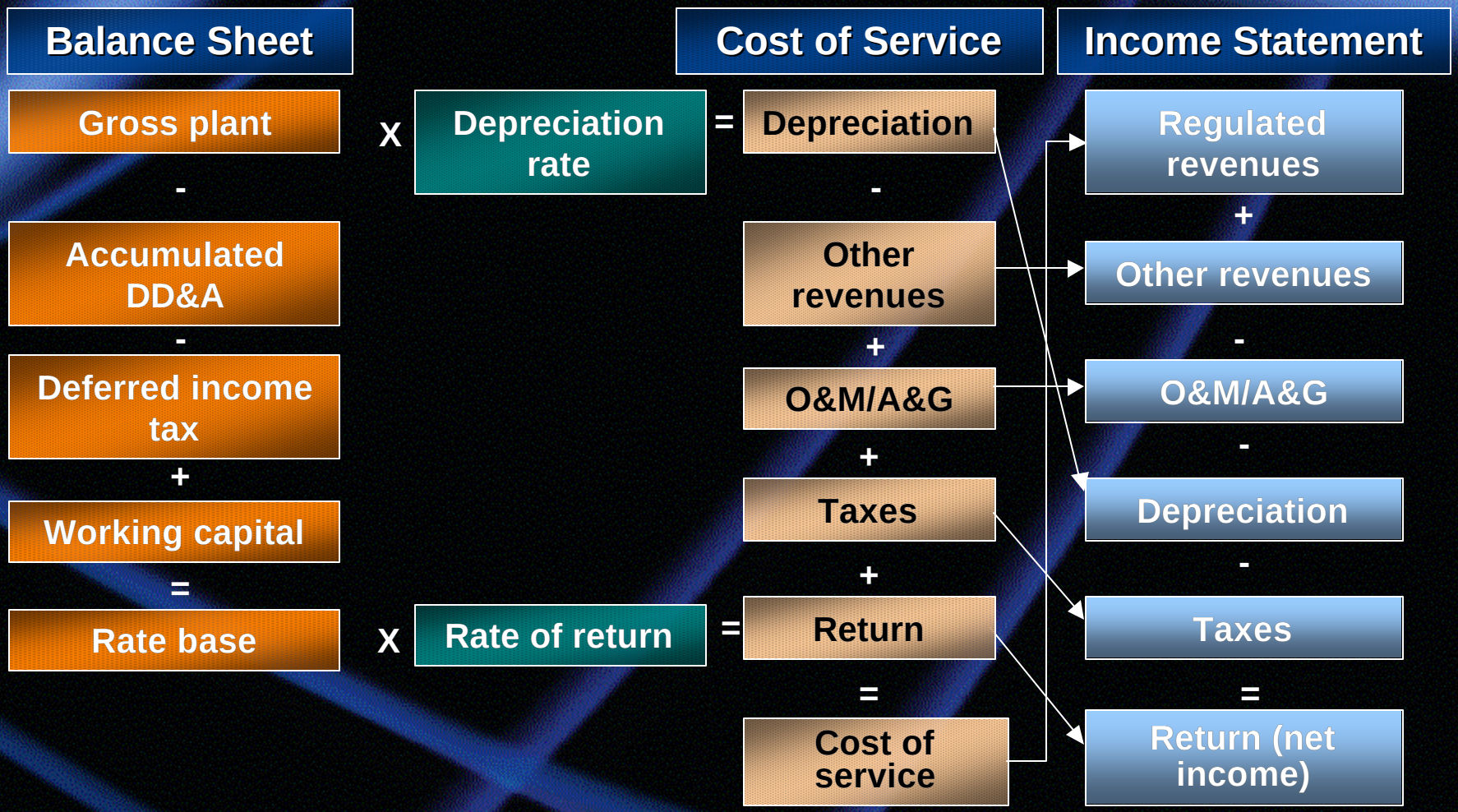
Rate Base and Return

Return = Rate base X rate of return

Rate base = Pipeline's long-term investment and short-term working capital requirements

Rate of return = Asset capitalization X cost of capital

Cost of Service Ratemaking Model



Cost Allocation and Rate Design

- Objectives
  - Recover cost of service
  - Apportion costs among classes of customers
  - Allocate risk
  - Encourage efficient use of system
  - Administrative ease and understandability

Cost Allocation and Rate Design

- Allocation
  - Seasonal
  - Peak day
  - Contractual
  - Volumetric
  - Mileage or non-mileage
  - Zone gate

Cost Allocation and Rate Design

- Rate (toll) design
  - Firm transportation
    - Demand
    - Commodity
  - Interruptible transportation
    - Volumetric commodity rate

Conclusions

- Building a cross-border gas pipeline is like building 2 gas pipelines in different countries at the same time
- Must deal with regulatory review from 2 countries simultaneously
- For cross-border pipelines, management is usually separate in each country
  - Agreements in place for joint operation of pipeline
- Cross-border pipelines have separate rates (tolls), 1 in each country
  - Sometimes as in the case of Alliance, 1 combined rate (toll) is quoted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